

IT IS CLAIMED:

1. A method for up-regulating the blood interleukin-10 (IL-10) level in a human subject, comprising
orally administering interferon-tau to the subject at a daily dosage of greater than 5×10^8 Units to produce an initial measurable increase in the subject's blood IL-10 level, relative to the blood IL-10 level in the subject in the absence of interferon-tau administration, and
continuing to orally administer interferon-tau to the subject on a regular basis of at least several times per week, independent of changes in the subject's blood IL-10 level, until a desired clinical endpoint is achieved.
2. The method of claim 1, wherein said administering comprises administering an interferon-tau selected from ovine interferon-tau and bovine interferon-tau.
3. The method of claim 2, wherein said administering comprises administering ovine interferon-tau having a sequence identified as SEQ ID NO:2 or SEQ ID NO:3.
4. The method of claim 1, wherein said oral administration is to the intestinal tract of the subject.
5. The method of claim 1, for treatment of an autoimmune condition in the subject, wherein said desired clinical endpoint is alleviation of the subject's symptoms.
6. The method of claim 5, wherein said autoimmune condition is multiple sclerosis.
7. The method of claim 5, wherein said autoimmune conditions is selected from the group consisting of Type I diabetes mellitus, rheumatoid arthritis, lupus erythematosus, psoriasis, Myasthenia Gravis, Graves' disease, Hashimoto's thyroiditis, Sjogren's syndrome, ankylosing spondylitis, and inflammatory bowel

disease.

8. The method of claim 1, for treatment of a viral infection in the subject, wherein said desired clinical endpoint is a reduction in symptoms associated with the viral infection or a reduction in blood viral titer.

9. The method of claim 8, wherein said virus is a DNA virus.

10. The method of claim 8, where in said virus is a RNA virus.

11. The method of claim 9, wherein said viral infection is hepatitis B.

12. The method of claim 10, wherein said viral infection is hepatitis C.

13. The method of claim 8, where the said viral infection is selected from the group consisting of hepatitis A, hepatitis B, hepatitis C, non-A, non-B, non-C hepatitis, Epstein-Barr viral infection, HIV infection, herpes virus (EB, CML, herpes simplex), papilloma, poxvirus, picorna virus, adeno virus, rhino virus, HTLV I, HTLV II, and human rotavirus.

14. The method of claim 1, for treatment of a disorder characterized by cellular proliferation in the subject, wherein said desired clinical endpoint is a reduction in symptoms associated with the disorder.

15. The method of claim 14, wherein said cellular proliferation conditions is selected from the group consisting of human lung large cell carcinoma, human colon adenocarcinoma, human malignant melanoma, human renal adenocarcinoma, human promyelocytic leukemia, human T cell lymphoma, human cutaneous T cell lymphoma, human breast adenocarcinoma, and steroid sensitive tumors.

16. The method of claim 1, further comprising administering a second therapeutic agent to the subject.

17. The method of claim 16, wherein said second therapeutic agent is selected from the group consisting of anti-viral agents, anti-cancer agents, and agents suitable for treatment of autoimmune disorders.

18. A method of treating slowing progression of multiple sclerosis in a subject, comprising

orally administering interferon-tau to the subject at a daily dosage of greater than about 5×10^8 Units to produce an initial measurable increase in the subject's blood IL-10 level, relative to the blood IL-10 level in the subject in the absence of interferon-tau administration, and

continuing to orally administer interferon-tau to the subject on a regular basis of at least several times per week, independent of changes in the subject's blood IL-10 level.

19. A method of reducing the risk of relapse in a subject suffering from multiple sclerosis, comprising

orally administering interferon-tau to the subject at a daily dosage of greater than about 5×10^8 Units to produce an initial measurable increase in the subject's blood IL-10 level, relative to the blood IL-10 level in the subject in the absence of interferon-tau administration, and

continuing to orally administer interferon-tau to the subject on a regular basis of at least several times per week, independent of changes in the subject's blood IL-10 level.

20. A method of treating an autoimmune condition in a subject, comprising

administering to the subject interferon-tau in an amount sufficient to produce an initial measurable increase in the subject's blood IL-10 level, relative to the blood IL-10 level in the subject in the absence of interferon-tau administration;

ceasing administration of interferon-tau for a selected period of time during which the subject's blood IL-10 level remains increased relative to the blood IL-10 level in the subject in the absence of interferon-tau administration; and

resuming administration of interferon-tau.